

**SAFETY DATA SHEET**

**3D TRASAR™ 3DT222**

**Section: 1. PRODUCT AND COMPANY IDENTIFICATION**

Product name : 3D TRASAR™ 3DT222

Other means of identification : Not applicable.

Recommended use : COOLING WATER TREATMENT

Restrictions on use : Refer to available product literature or ask your local Sales Representative for restrictions on use and dose limits.

Company : Nalco Company  
1601 W. Diehl Road  
Naperville, Illinois 60563-1198  
USA  
TEL: (630)305-1000

Emergency telephone number : (800) 424-9300 (24 Hours) CHEMTREC

Issuing date : 01/17/2019

**Section: 2. HAZARDS IDENTIFICATION**

**GHS Classification**

Skin corrosion : Category 1  
Serious eye damage : Category 1

**GHS Label element**

Hazard pictograms :



Signal Word : Danger

Hazard Statements : Causes severe skin burns and eye damage.

Precautionary Statements : **Prevention:**  
Wear protective gloves/ protective clothing/ eye protection/ face protection.  
**Response:**  
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair):  
Take off immediately all contaminated clothing. Rinse skin with water/shower. IF  
INHALED: Remove person to fresh air and keep comfortable for breathing.  
Immediately call a POISON CENTER/doctor. IF IN EYES: Rinse cautiously with  
water for several minutes. Remove contact lenses, if present and easy to do.  
Continue rinsing. Immediately call a POISON CENTER or doctor/ physician.

**Disposal:**  
Dispose of contents/ container to an approved waste disposal plant.

Other hazards : Do not mix with bleach or other chlorinated products – will cause chlorine gas.

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and/or explosion do not breathe fumes.

### Section: 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid inhalation, ingestion and contact with skin and eyes. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8.
- Environmental precautions : Do not allow contact with soil, surface or ground water.
- Methods and materials for containment and cleaning up : Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Flush away traces with water.

### Section: 7. HANDLING AND STORAGE

- Advice on safe handling : Do not ingest. Do not breathe dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Wash hands thoroughly after handling. Use only with adequate ventilation. Do not mix with bleach or other chlorinated products – will cause chlorine gas.
- Conditions for safe storage : Keep away from strong bases. Keep out of reach of children. Keep container tightly closed. Store in suitable labelled containers.
- Suitable material : The following compatibility data is suggested based on similar product data and/or industry experience: Compatibility with Plastic Materials can vary; we therefore recommend that compatibility is tested prior to use.
- Unsuitable material : not determined

### Section: 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Components with workplace control parameters

Components	CAS-No.	Form of exposure	Permissible concentration	Basis
Phosphoric Acid	7664-38-2	TWA	1 mg/m <sup>3</sup>	ACGIH
		STEL	3 mg/m <sup>3</sup>	ACGIH
		TWA	1 mg/m <sup>3</sup>	NIOSH REL
		STEL	3 mg/m <sup>3</sup>	NIOSH REL
Hydrochloric Acid	7647-01-0	TWA	1 mg/m <sup>3</sup>	OSHA Z1
		Ceiling	2 ppm	ACGIH
		Ceiling	5 ppm 7 mg/m <sup>3</sup>	NIOSH REL
Zinc Chloride	7646-85-7	C	5 ppm 7 mg/m <sup>3</sup>	OSHA Z1
		TWA (Fumes)	1 mg/m <sup>3</sup>	OSHA Z1
		TWA (Fumes)	1 mg/m <sup>3</sup>	ACGIH

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		STEL (Fumes)	2 mg/m <sup>3</sup>	ACGIH
		TWA (Fumes)	1 mg/m <sup>3</sup>	NIOSH REL
		STEL (Fumes)	2 mg/m <sup>3</sup>	NIOSH REL
2-Phosphono-1,2,4-Butanetricarboxylic Acid	37971-36-1	TWA (Aerosol.)	10 mg/m <sup>3</sup>	AIHA WEEL

Engineering measures : Effective exhaust ventilation system. Maintain air concentrations below occupational exposure standards.

#### Personal protective equipment

Eye protection : Safety goggles  
Face-shield

Hand protection : Wear the following personal protective equipment:  
Standard glove type.  
Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Skin protection : Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing

Respiratory protection : When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after handling. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.

#### Section: 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Liquid

Colour : Clear, yellow to amber

Odour : Acidic

Flash point : does not flash

pH : < 1.60,(100 %)

Odour Threshold : no data available

Melting point/freezing point : Freezing Point: -11.67 °C

Initial boiling point and boiling range : no data available

Evaporation rate : no data available

Flammability (solid, gas) : no data available

Upper explosion limit : no data available

Lower explosion limit : no data available

Vapour pressure : 25.8 mm Hg, (37.8 °C),

Relative vapour density : no data available

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Relative density	: 1.114, (25.0 °C),
Density	: 1.102 g/cm <sup>3</sup> , 9.2 lb/gal
Water solubility	: completely soluble
Solubility in other solvents	: no data available
Partition coefficient: n-octanol/water	: no data available
Auto-ignition temperature	: no data available
Thermal decomposition	: no data available
Viscosity, dynamic	: 20 mPa.s (25 °C)
Viscosity, kinematic	: 3.2 - 4 mm <sup>2</sup> /s (20 °C)
Molecular weight	: no data available
VOC	: no data available

#### Section: 10. STABILITY AND REACTIVITY

Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: Do not mix with bleach or other chlorinated products – will cause chlorine gas.
Conditions to avoid	: Extremes of temperature
Incompatible materials	: Strong bases
Hazardous decomposition products	: In case of fire, hazardous decomposition products may be produced such as: Carbon oxides nitrogen oxides (NO <sub>x</sub> ) Sulphur oxides Oxides of phosphorus HCl Gives off hydrogen by reaction with metals.

#### Section: 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure	: Inhalation, Eye contact, Skin contact
<b>Potential Health Effects</b>	
Eyes	: Causes serious eye damage.
Skin	: Causes severe skin burns.
Ingestion	: Causes digestive tract burns.
Inhalation	: May cause nose, throat, and lung irritation.
Chronic Exposure	: Health injuries are not known or expected under normal use.

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### Experience with human exposure

Eye contact : Redness, Pain, Corrosion  
Skin contact : Redness, Pain, Corrosion  
Ingestion : Corrosion, Abdominal pain  
Inhalation : Respiratory irritation, Cough

### Toxicity

#### Product

Acute oral toxicity : no data available  
Acute inhalation toxicity : no data available  
Acute dermal toxicity : no data available  
Skin corrosion/irritation : no data available  
Serious eye damage/eye irritation : no data available  
Respiratory or skin sensitization : no data available  
Carcinogenicity : no data available  
Reproductive effects : no data available  
Germ cell mutagenicity : no data available  
Teratogenicity : no data available  
STOT - single exposure : no data available  
STOT - repeated exposure : no data available  
Aspiration toxicity : no data available

#### **Components**

Acute oral toxicity : Phosphoric Acid  
LD50 rat: > 2,600 mg/kg  
Zinc Chloride  
LD50 rat: 740 mg/kg  
2-Phosphono-1,2,4-Butanetricarboxylic Acid  
LD50 rat: > 6,500 mg/kg

#### **Components**

Acute inhalation toxicity : Hydrochloric Acid  
LC50 rat: 3789 ppm  
Exposure time: 4 h  
Test atmosphere: gas

#### **Components**

Acute dermal toxicity : Phosphoric Acid  
LD50 rabbit: > 2,000 mg/kg

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## Section: 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Environmental Effects : Toxic to aquatic life with long lasting effects.

### Product

Toxicity to fish : LC50 *Oncorhynchus mykiss* (rainbow trout): 10.21 mg/l  
Exposure time: 96 hrs  
Test substance: Product

NOEC *Oncorhynchus mykiss* (rainbow trout): 2.5 mg/l  
Exposure time: 96 hrs  
Test substance: Product

Toxicity to daphnia and other aquatic invertebrates : EC50 *Ceriodaphnia dubia*: 12.94 mg/l  
Exposure time: 48 hrs  
Test substance: Product

NOEC *Ceriodaphnia dubia*: 6.25 mg/l  
Exposure time: 48 hrs  
Test substance: Product

### Components

Toxicity to algae : Phosphoric Acid  
EC50 *Desmodesmus subspicatus* (green algae): > 100 mg/l  
Exposure time: 72 h

2-Phosphono-1,2,4-Butanetricarboxylic Acid  
NOEC *Desmodesmus subspicatus* (green algae): 17.8 mg/l  
Exposure time: 72 h

### Persistence and degradability

The organic portion of this preparation is expected to be inherently biodegradable.

Total Organic Carbon (TOC) : 40,000 mg/l

Chemical Oxygen Demand (COD): 430,000 mg/l

Biochemical Oxygen Demand (BOD):

Incubation Period	Value	Test Descriptor
5 d	689 mg/l	Product

### Mobility

The environmental fate was estimated using a level III fugacity model embedded in the EPI (estimation program interface) Suite TM, provided by the US EPA. The model assumes a steady state condition between the total input and output. The level III model does not require equilibrium between the defined media. The information provided is intended to give the user a general estimate of the environmental fate of this product under the defined conditions of the models.

If released into the environment this material is expected to distribute to the air, water and soil/sediment in the approximate respective percentages;

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Air : <5%  
Water : 30 - 50%  
Soil : 50 - 70%

The portion in water is expected to be soluble or dispersible.

#### Bioaccumulative potential

This preparation or material is not expected to bioaccumulate.

#### Other information

no data available

### Section: 13. DISPOSAL CONSIDERATIONS

If this product becomes a waste, it could meet the criteria of a hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Before disposal, it should be determined if the waste meets the criteria of a hazardous waste.

Hazardous Waste: : D002

Disposal methods : The product should not be allowed to enter drains, water courses or the soil. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility.

Disposal considerations : Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

### Section: 14. TRANSPORT INFORMATION

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

The presence of an RQ component (Reportable Quantity for U.S. DOT) in this product causes it to be regulated with an additional description of RQ for road, or as Environmentally hazardous for road and air, ONLY when the net weight in the package exceeds the calculated RQ for the product.

#### Land transport (DOT)

Proper shipping name : CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.  
Technical name(s) : Zinc Chloride, Hydrochloric Acid, Phosphoric Acid  
UN/ID No. : UN 3264  
Transport hazard class(es) : 8  
Packing group : III  
Reportable Quantity (per package) : 33,333 lbs  
RQ Component : ZINC CHLORIDE

#### Air transport (IATA)

Proper shipping name : CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.  
Technical name(s) : Zinc Chloride, Hydrochloric Acid, Phosphoric Acid

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UN/ID No. : UN 3264  
 Transport hazard class(es) : 8  
 Packing group : III  
 Reportable Quantity (per package) : 33,333 lbs  
 RQ Component : ZINC CHLORIDE

### Sea transport (IMDG/IMO)

Proper shipping name : CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.  
 Technical name(s) : Zinc Chloride, Hydrochloric Acid, Phosphoric Acid  
 UN/ID No. : UN 3264  
 Transport hazard class(es) : 8  
 Packing group : III

\*Marine pollutant : Zinc Chloride

\* Note: This product is regulated as a Marine Pollutant when shipped by Rail or Highway (in bulk quantities), and when shipped by water in all quantities.

### Section: 15. REGULATORY INFORMATION

**TSCA list** : No substances are subject to a Significant New Use Rule.  
 No substances are subject to TSCA 12(b) export notification requirements.

### EPCRA - Emergency Planning and Community Right-to-Know Act

#### CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Zinc Chloride	7646-85-7	1000	33333

#### SARA 304 Extremely Hazardous Substances Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Hydrochloric Acid	7647-01-0	5000	132030

**SARA 311/312 Hazards** : Skin corrosion or irritation  
 Serious eye damage or eye irritation

#### SARA 302

Hydrochloric Acid 7647-01-0

#### SARA 313

The following components are subject to reporting levels established by SARA Title III, Section 313:

Hydrochloric Acid	7647-01-0	1 - 5 %
Zinc Chloride	7646-85-7	1 - 5 %



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#### California Prop. 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

#### INTERNATIONAL CHEMICAL CONTROL LAWS :

##### United States TSCA Inventory

The substances in this preparation are included on or exempted from the TSCA 8(b) Inventory (40 CFR 710)

##### Australia. Industrial Chemical (Notification and Assessment) Act

All substances in this product comply with the National Industrial Chemicals Notification & Assessment Scheme (NICNAS).

##### Canadian Domestic Substances List (DSL)

The substance(s) in this preparation are included in or exempted from the Domestic Substance List (DSL).

##### Japan. ENCS - Existing and New Chemical Substances Inventory

All substances in this product comply with the Law Regulating the Manufacture and Importation Of Chemical Substances and are listed on the Existing and New Chemical Substances list (ENCS).

##### Korea. Korean Existing Chemicals Inventory (KECI)

All substances in this product comply with the Chemical Control Act (CCA) and are listed on the Existing Chemicals List (ECL)

##### Philippines Inventory of Chemicals and Chemical Substances (PICCS)

All substances in this product comply with the Republic Act 6969 (RA 6969) and are listed on the Philippines Inventory of Chemicals & Chemical Substances (PICCS).

##### China Inventory of Existing Chemical Substances

All substances in this product comply with the Provisions on the Environmental Administration of New Chemical Substances and are listed on or exempt from the Inventory of Existing Chemical Substances China (IECSC).

##### Taiwan Chemical Substance Inventory

All substances in this product comply with the Taiwan Existing Chemical Substances Inventory (ECSI).

##### New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand

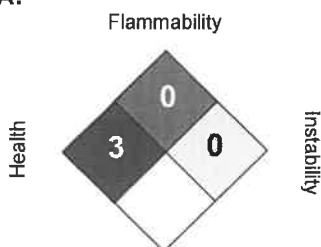
All substances in this product comply with the Hazardous Substances and New Organisms (HSNO) Act 1996, and are listed on or are exempt from the New Zealand Inventory of Chemicals.

#### Section: 16. OTHER INFORMATION

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## NFPA:



Special hazard.

## HMIS III:

<b>HEALTH</b>	<b>3</b>
<b>FLAMMABILITY</b>	<b>0</b>
<b>PHYSICAL HAZARD</b>	<b>0</b>

0 = not significant, 1 = Slight,  
2 = Moderate, 3 = High  
4 = Extreme, \* = Chronic

Revision Date : 01/17/2019  
Version Number : 1.4  
Prepared By : Regulatory Affairs

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

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